VEGETATION CLASSIFICATION AND SURVEY

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EDITORIAL

Vegetation Classification and Survey: the first year

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Abstract

We report on the completed first volume of Vegetation Classification and Survey (VCS), which included ten Research Papers, six Short Database Reports, two Long Database Reports, two Forum Papers and one Report. We highlight three outstanding papers as examples of contributions of which we would like to see more in the future. Finally, we announce a new article type "VCS Methods" and report about the status of two upcoming Special Collections. Lists of colleagues who served as reviewers or linguistic editors in 2020 are included in appendices.

Abbreviations: IAVS = International Association for Vegetation Science; VCS = Vegetation Classification and Survey.

Keywords

article processing charge, ecoinformatics, editorial, gold open access, International Association for Vegetation Science (IAVS), scientific journal, vegetation classification, vegetation survey, vegetation-plot database

Introduction

With this Editorial, we open the second volume of Vegetation Classification and Survey (VCS), a gold open access journal of the International Association for Vegetation Science (IAVS). Establishing a new high-quality journal is a big challenge in these days (some would even say, it is a crazy task), but we think that we are off to a good start.

Our first volume included 22 articles: ten Research Papers, six Short Database Reports, two Long Database Reports, two Forum Papers, one Report and one Editorial. The first authors of these papers came from 15 countries and six continents (i.e., all continents except Antarctica). Altogether, the papers had 145 authors from 26 countries (persons who authored more than one paper are only counted once). Of the research papers, three used the Braun-Blanquet system (Guarino et al. 2018) and three the EcoVeg system (Faber-Langendoen et al. 2014) for naming the vegetation units. Three additional papers did not apply a particular classification system, but used informal units instead, while one paper presented a new classification algorithm.

As Chief Editors of VCS, we emphasise that this successful inaugural volume would not have been possible without the huge support provided by IAVS. Most importantly, IAVS members have been exempted from article processing charges. This exemption will continue in 2021, i.e., papers submitted until 31 December 2021 will be published free of charge after acceptance if the first author

is an IAVS member. Besides these financial aspects, the success of the journal relies on the dedication and trust of the authors, reviewers and on the editorial team, who shared our enthusiasm (see also Appendix 1 and 2). Last but not least, we gratefully acknowledge Pensoft, our publisher, whose team has been working tirelessly to make this journal happen.

We expected challenges regarding open access when we wrote our inaugural Editorial one year ago (Jansen et al 2020), especially from the need to require article processing charges and the need to guarantee a high quality of the publications. While we can already assert that the quality of the published papers is pleasingly high, the challenges of asking for money is thankfully still another year away from us given the generous support by IAVS.

Journal management

Papers submitted to VCS are managed and published in the software framework and manuscript management system ARPHA, which was developed by Pensoft. Whereas not everything runs as smoothly and intuitively as one would wish, we are quite taken by the many thoughtful details unique to ARPHA. For hickups and hurdles we can be sure of a never-tired publishing team, eager to fulfil our wishes. If you encounter any glitches or detect a gap in the detailed Author Guidelines, please contact the current Managing Editor.

If you want to have a look at all the articles published in VCS so far, please visit https://vcs.pensoft.net/browse_journal_articles. If you are interested in the number of citations, and who is citing them, you can visit https://scholar.google.de/citations?hl=de&user=X-sKKBm0AAAAJ.

VCS is also partnering with the Vegetation Science Blog (https://vegsciblog.org/), the official blog of the IAVS journals. All five IAVS periodicals (Journal of Vegetation Science, Applied Vegetation Science, Vegetation Classification and Survey, Palaearctic Grasslands, IAVS Bulletin) use the blog as a joint platform to highlight new papers and inform readers about journal developments, new issues and forthcoming special issues. Of the VCS authors of 2020, four used this opportunity to increase the visibility of their publication. Moreover, there have been seven contributions from us editors.

Outstanding papers in 2020

It was difficult to choose outstanding papers from Volume 1 as all contributions had a similarly high level. Nevertheless we want to highlight three papers that, in our opinion, are exemplary for the kind of contributions we would like to see more of in the future.

Abutaha et al. (2020) provided the first classification of the vegetation units on Gebel Elba, an arid mountain range in southeastern Egypt, and identified the environmental factors controlling their distribution. Gebel Elba has vegetation similar to the highlands of East Africa and the southwestern Arabian Peninsula. On the basis of 169 relevés, and using TWINSPAN, the authors identified seven communities along the elevational gradient. They found that each community was restricted to a confined habitat depending on its drought resistance ability. A canonical ordination revealed the importance of elevation and soil quality in determining the vegetation structure of Gebel Elba. The species richness increased with elevation as a result of reduced stress and increased water availability at the upper wadis, showing the importance of orographic precipitation, soil quality and the complex topography in determining the vegetation pattern in this arid region.

Central Asia is another region where vegetation classification in general and the Braun-Blanquet approach in particular do not have a strong tradition. Therefore, it is really impressive how the team of Arkadiusz Nowak has been systematically sampling and analysing one vegetation type of Tajikistan and neighbouring regions after the other. A long series of publications in various international journals has emerged from these studies (e.g. Nowak et al. 2015, Świerszcz et al. 2020). In VCS, Nowak et al. (2020) addressed the diversity of tall-forb vegetation. They used a rich dataset of 244 relevés from throughout Tajikistan and southern Kyrgysztan, classified them with TWINSPAN, and characterised the resulting units comprehensively in terms of diagnostic species, distribution (i.e., maps), environmental and biodiversity variables. Further they translated their results into a formal syntaxonomy, concluding that most of the stands belong to the class *Prangetea ulopterae*, comprising the Irano-Turanian tall-forb communities. The authors also nicely used the opportunity of an online journal to include colour figures at no cost, visualising the structure (and beauty) of their study communities with two photo plates. We hope that other author teams will follow this example in the future.

Vegetation classification is an essential tool for nature conservation. Around the world natural forests have been replaced by agricultural land along human history, but this loss is still in progress in many regions. Tropical and subtropical forests have dramatically declined over the last decades. An example is the tropical seasonally dry forests in South America. Zeballos et al. (2020) conducted a vegetation survey on the southernmost representation of these forests, the subtropical espinal forests in Central Argentina. They sampled 122 plots of forest stands in the Córdoba region, and classified them into four vegetation types of seasonally dry subtropical forest. The main environmental factors affecting species composition were temperature and precipitation seasonality as well as soil-texture and sodium content. The authors emphasise that the remaining forest patches represent only 3% of the potential extent of that vegetation type in Córdoba, with only a small fraction included in protected areas. Therefore, they call for urgent conservation measures to preserve the last remaining forest patches.

News and prospects for 2021

Starting with Volume 2, we introduce a new article type called "VCS Methods". As the label suggests, it will be reserved for methodological papers on vegetation classification and survey, i.e. the description of new methods or the evaluation of existing methods using test data sets and case studies. Methods can be from all fields covered by VCS, including field sampling, databasing, classification methodology or any tool and method used in vegetation ecoinformatics. A paper of 2020 that would have fitted in this category is Attorre et al. (2020).

We also introduce a new article type "Short Communication" for the Permanent Collection *Phytosociological Nomenclature*. It is intended for short papers presenting validations, typifications etc. of previously published syntaxa, provided that these nomenclatural novelties are relevant for a wider international audience. Please note that nomenclatural proposals (e.g., for *nomina conservanda*) should be directly sent to the responsible editor (wolfgang.willner@univie.ac.at). Once a year, the new proposals will be published in conjunction with the Report of the Committee for Changes and Conservation of Names (CCCN), with all authors of proposals being co-authors (additionally, the authors of individual proposals will be indicated in the Report). Publication of nomenclatural proposals will be permanently free of charge. For guidelines on proposals, see Appendix 2 in Theurillat et al. (2021).

In summer 2020, we announced two Special Collections: *Classification of grasslands and other open vegetation types in the Palaearctic* (edited by Idoia Biurrun, Jürgen Dengler, Monika Janišová and Arkadiusz Nowak) and *The 'International Vegetation Classification' initiative: case studies, syntheses, and perspectives on ecosystem diversity around the globe* (edited by Don Faber-Langendoen, Wolfgang Willner, Changcheng Liu, John Hunter and Gonzalo Navarro). Both teams have finished their evaluation of submitted abstracts, and the invited papers are expected to be submitted during the next few months. Since VCS has a continuous publishing model, contributions will be published as soon as they are accepted. In fact, the first paper of the Palaearctic grasslands collection has already been published in Volume 1 (Nowak et al. 2020). Besides being labelled as part of a collection on the title page, all papers belonging to a collection can be accessed via the "Collections" menu under "Articles" or "Issues" on the VCS website or by going directly to https://vcs.pensoft.net/collections (click on the title of the collection to see the list of papers).

If the flow of submissions remains at the current high level, every three months we plan to select an Editors' Choice paper of the previous quarter and highlight it in a vegsciblog entry with a photo (or other illustration), while mentioning also all the other published articles of that period. At the end of the year we intend to compose the cover of the annual volume (online and print-on-demand) from these four photos or illustrations. Therefore, we would like to encourage all authors to submit suitable photos when their article is accepted.

A major goal, given the science evaluation systems in many countries, is the inclusion of VCS in Scopus and the Web of Science at the earliest possible date. Authors can help to achieve this goal in various ways: by submitting high-quality papers to VCS, by serving as reviewers, and, not to forget, by citing VCS papers in other journals!

Author contributions

W.W. planned and drafted this editorial while all other authors made significant contributions.

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Appendix 1

Reviewers for VCS in 2020

We thank the following colleagues who served during the last year as reviewers for VCS (number of reviews in brackets):

- Hossein Akhani (1)
- Stephen Bell (1)
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- George Jones (1)
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- Jan Roleček (1)
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- Michal Slezák (1)
- Lubomír Tichý (2)
- Ioannis Tsiripidis (1)
- Nikolay Velev (1)

Appendix 2

Linguistic Editors for VCS in 2020

We thank the following colleagues who served during the last year as Linguistic Editors for VCS (number of edited papers in brackets):

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- Don Faber-Langendoen (2)
- Jim Martin (3)
- Megan McNellie (2)
- Emmeline Topp (1)
- Lynda Weekes (1)